witness about are either the exhibits that were introduced in those cases or are true copies; we don't know that.

TRIAL EXAMINER: All right.

Mr. Sparks: We have had no opportunity this morning to examine either one of those documents and this morning is the first time any reference was made to either one of them on this cross-examination.

[17523] TRIAL EXAMINER: All right.

Mr. Goldberg: I suggest, Mr. Examiner,-

TRIAL EXAMINES: If counsel can assure the Examiner it is his belief that when the original copies of the exhibits are produced they will prove to be exact copies—

Mr. GOLDBERG: That these will prove to be?

TRIAL EXAMINER: Yes.

Mr. Goldberg: No question in my mind about that.

TRIAL EXAMINER: All right, then, the objection is overruled as directed to this line of questioning in so far as it relates to the authentication of these two documents, pending the production of the original exhibits. I mean by that, if on the production of the original exhibits it should prove these are not exact copies then some remedial steps will be taken.

Is there a pending question?

Mr. Sparks: I believe the question was answered.

TRIAL EXAMINER: Let us have the record read.

(The record was read.)

Mr. Sparks: May I have a continuing objection, Mr. Examiner, to any further questions with regard to what has been referred to by Mr. Goldberg as Exhibit 24 in IT-5914?

TRIAL EXAMINER: Yes.

By Mr. GOLDBERG:

Q. Mr. Zinder, the lines there referred to afe the [17524] 220 Kv. lines, are they not? A. The statement which you read appearing on page 17 of this document refers to two circuits operating at 230 Kv. connected directly with two circuits of Holtwood Company running to Baltimore.

Q. We now speak of them as 220 Kv., do we not? A. Yes, I believe that is right.

Q. This appears, does it not, at the bottom of page 17 and top of page 18:

"The 25 cycle 13.3 Kv. energy transmitted from Safe Harbor to Conestoga Substation is stepped up to 132 Kv. for transmission by Holtwood to various points from Conestoga Substation in Pennsylvania, to Perryville Substation in Maryland where it is sold to the Railroad by Baltimore. Four 132 Kv. 25 cycle, single phase, transmission lines owned and operated by Holtwood for this purpose run between these two points. Energy is also purchased by the Railroad at Conestoga for transmission over its own transmission lines running from Conestoga to Harrisburg, Pennsylvania, to Coatesville, Pennsylvania, and also to Perryville, Maryland."

I have correctly read that, haven't I?

A. The statement you read appears at the bottom of page 17 and the top of page 18 of the document you have submitted [17525] to me.

Q. You state, do you not, on page 18:

"Energy is also sold by Holtwood to the Edison Light and Power Company at York, Pennsylvania, and to the Philadelphia Electric Company at Coatesville, Pennsylvania, over the 2-circuit 70 KV transmission lines running from the Holtwood plant"?

A. What you read is a portion of the last paragraph begin-

ning on page 18 of the document before me.

Q. You do not there say, do you, that the energy is also sold by Safe Harbor? A. There is nothing in that statement saying that energy is also sold by Safe Harbor.

Q. At the top of page— A. Pardon me, could I go

back to page 18?

Q. Yes. A. All right.

Q. At the top of page 25 of Exhibit 24 you state, do you not:

"The contract between Holtwood and Baltimore as it is modified is similar to the agreement under which Safe Harbor sells all of its power and energy to Holtwood and Baltimore in that it is largely independent of the amount of power and energy supplied."

You so state, do you not?

[17526] A. That is a portion of the paragraph appearing on page 25 of the document before me.

Q. Do you want to read the balance of the paragraph?

A. I don't want to read it.

Q. I just want you to know you are at liberty to read any additional portions you wish. A. I just wanted the

record to show that it is not an entire paragraph.

Q. Yes. The balance of the paragraph isn't necessary for that first sentence, the first sentence is an accurate sentence without the balance of the paragraph, isn't that so?

A. Well, I am not sure, I would have to study it a little bit more.

Q. Then let's read the balance of the paragraph so that nobody will have any doubts. Continuing the paragraph on page 25, you state, do you not:

"Thus, a reduction in Holtwood's operating expenses as a result of reduction in the cost of service supplied to Holtwood by Safe Harbor would automatically reduce the cost of service to Baltimore"?

A. What you have read is the balance of the first para-

graph appearing on page 25 of that document.

Q. Referring to page 27 there is a table entitled: "Table 8, Safe Harbor Water Power Corporation, Docket OIT-5914, Revenue from Energy Sales 1938-1943, Inclusive," isn't [17527] that so? A. That heading appears on page 27 of the document.

Q. And it has seven columns, right? A. Correct.

Q. The first column is "Year;" the second is "Sales to;" the third is "Kilowatt hours;" the fourth is "Percent of total;" the fifth is "Gross revenue;" the sixth is "Percent of total;" and the seventh is "Average revenue cents per kilowatt hours." A. Those are the seven columns.

Q. Under the second column "Sales to" there is shown Baltimore and Holtwood companies, right? A. There is

shown Baltimore and Holtwood.

Q. Those are Baltimore and Holtwood companies, right? A. I assume so.

Q. Those are the only sales shown for Safe Harbor, right? A. There are no other sales listed under the column "Sales to."

Q. On page 28 there is a tabulation entitled "Table 9, Safe Harbor Water Power Corporation, Docket KT-5914, Holtwood Sales of Energy 1938-1943, inclusive," isn't that so? A. The title appears at the top of Table 9, page 28.

Q. And Column 2 of that table is entitled "Pur-

chaser," right? [17528] A. That is correct.

Q. And the purchasers are shown in each of those years as Baltimore, Pennsylvania Power & Light Company, Philadelphia Electric Company, Edison Light & Power Company and Pennsylvania Railroad Company! A. That is right.

Q. Turning now to page 29 we find another table, do we not, entitled "Table 10, Safe Harbor Water Power Corporation, Docket JT-5914, Interchange Transactions by

Holtwood, 1938-1943, inclusive," isn't that so? A. That title appears at the top of Table 10 on page 29 of the document.

Q. And the companies with whom the interchange transactions take place are listed as Philadelphia Electric Company at Perryville and Thorndale, Pennsylvania Power & Light Company at Harrisburg and Metropolitan Edison Company at Violet Hill, isn't that so? A. The companies you named are those listed in Column 2 of that table.

Q. And on Tables 9 and 10 Safe Harbor isn't mentioned, isn't that so?

A. Safe Harbor's name appears at the top of the table.

Q. Well, as a purchaser or seller? A. It isn't mentioned as a purchaser and is not listed in Column 2 labelled "Company."

[17529] Q. Of Table 10? A. Of Table 10.

Q. And the appearance of Safe Harbor is in connection with the designation of the proceeding, the appearance of the name "Safe Harbor"? A. I assume so.

Q. Now then, referring to page 30 there is a table entitled "Table 11, Safe Harbor Water Power Corporation, Docket IT-5914, Sales to Railroad for Years 1938-1943, inclusive," isn't that so? A. That title appears on page 30.

Q. And the selling companies to the Railroad on that table are shown as being Baltimore Company and Holtwood, isn't that so? A. Column 2 of the table on page 30 under the heading "Selling company" has only two names, Baltimore and Holtwood.

[17537] Mr. Sparks: Mr. Examiner, we are prepared with some redirect at this time, but I think you will realize that the character of the cross-examination today, up to now, has been such that we could not under

any circumstances be prepared to go forward with redirect with regard to that cross examination.

TRIAL EXAMINER: Will you specify what cross examination you have reference to?

Mr. Sparks: I will be glad to. I refer specifically to the cross examination by counsel for the staff relating to Exhibit X in the Safe Harbor case, IT-5914, which contains 40-some pages, and to cross examination by counsel for the staff with regard to Exhibit 24, in the Safe Harbor [17538] rate case, IT-5914, which documents were first referred to in this record this morning. We have had no opportunity to examine those two documents, nor have we had an opportunity to examine the direct testimony or the testimony given under cross examination, if there was any, of the witnesses who sponsored those two exhibits in IT-5914, and in the earlier Safe Harbor case, where I understand the document referred to as Exhibit X was also an exhibit.

It will be necessary for us, if we are to have a reasonable opportunity to complete the redirect testimony of this witness, to examine the testimony of the witnesses who sponsored those two exhibits and to examine those two exhibits. We have not, as I say, had an opportunity to do that, and it is unreasonable to require us to go ahead with redirect based on this morning's cross examination, without our having an opportunity to make that study and to give consideration to those documents and to today's transcript.

[17539] TRIAL EXAMINER: Why do you refer to the testimony of the witnesses in the prior proceeding?

Mr. Sparks: Because we don't know, Mr. Examiner, at this time, whether the testimony of the witnesses who sponsored those two exhibits has any bearing on the redirect of this witness with relation to his

cross-examination this morning. We don't know until we examine that testimony. They qualified the exhibits in that proceeding, presumably, but we have had no opportunity to even determine that, let alone to determine what they said.

Mr. GOLDBERG: May I be heard, Mr. Examiner?

Mr. Sparks: And let me say one other thing, Mr. Examiner. This witness was first on cross-examination, I think, a week ago. Counsel for the Staff waited until the last day before he brought in these exhibits, and made it necessary for us to consider those exhibits before going forward with redirect.

Mr. Goldberg: May I be heard?

TRIAL EXAMINER: No, I don't think it is necessary.

Mr. Goldberg: I just wanted to address one inquiry to counsel for the Respondents through the Examiner

TRIAL EXAMINER: What is the nature of the inquiry?

Mr. Goldberg: Counsel for the Respondents stated this is the first time today that on the record reference has been made to these exhibits. I would like to inquire whether today, [17540] was his first knowledge of those exhibits and his knowledge of their contents.

Mr. Sparks: My answer to that, Mr. Examiner, is an unqualified "yes." Today is the first time I have ever laid eyes on those two exhibits, and it is the first time I have ever heard of those two exhibits.

TRIAL EXAMINER: I don't see why you should not be prepared to conduct redirect examination of the witness by Monday morning with regard to those two exhibits.

Mr. Sparks: I am not sure that we will be, Mr. Examiner. You will recall that we have had proposed rebuttal testimony, and exhibits served on us. If your ruling is to be applied to us with regard to cross-examination, on those exhibits and on that testimony, and if we are to be given an opportunity to prepare rebuttal on those exhibits and on that testimony, I don't believe we can be ready by Monday morning with this witness.

TRIAL EXAMINER: Well, I will give you until Monday morning. Now, Respondents' counsel is not single-handed. He has here before us the very witness who prepared those previous exhibits and who apparently is familiar with that in both those previous proceedings.

Mr. Sparks: We have here before us the witness who prepared those exhibits, Mr. Examiner, did I hear you say?

TRIAL EXAMINER: Exhibit X and Exhibit 24.

[17541] Mr. Sparks: No, Mr. Examiner, there is no testimony that the witness Zinder prepared those exhibits.

TRIAL EXAMINER: He assumed responsibility for the preparation of those exhibits, did he not?

Mr. Goldberg: "Directed and supervised," according to his testimony.

Mr. Sparks: Whatever the evidence shows, Mr. Examiner, it shows. But I am sure it does not show that this witness prepared them; and I am sure the record does show, this morning, that the witnesses who sponsored those exhibits in the Safe Harbor case prepared them, and not this witness.

TRIAL EXAMINER: Well, I think this witness can be of sufficient aid to you in preparing for that part of

the redirect to justify the Examiner setting Monday morning, 10 o'clock, as the time for you to conduct your redirect of this witness.

Mr. Sparks: Let me say, Mr. Examiner, that on the basis of Mr. Goldberg's statement yesterday that he would be through with the cross-examination early today, the witness Zinder made an appointment to go to New York Friday. So that he will not be available for any help to me, or to anybody else, in preparing his redirect.

TRIAL EXAMINER: When will the witness return from New York? Tomorrow evening?

THE WITNESS: Probably.

[17542] TRIAL EXAMINER: I still set Monday, 10 o'clock, as the time for your redirect.

Mr. Sparks: I take exception to your Honor's ruling and say the ruling deprives Respondents of a fair trial because we have not been given a reasonable opportunity to prepare redirect.

[17543]

REDIRECT EXAMINATION

BY MR. SPARKS:

[17552] Q. At page 16517 you were questioned about the possibility of depending on "as," if and when available" power to meet firm power commitments. This question followed other questions relating to the differences between Penn Water's 60-cycle generation under certain specified conditions and the 60-cycle requirements of the Pennsylvania customer loads. Then, at line 16 of page 16518, you agreed that "sources that are available only on an as, if, and when basis, are not considered by me as firm power commitments," was that your testimony? A. That is right, yes.

Q. Does that testimony mean that Penn Water cannot receive supplemental energy supplies on an as, if, and when basis, and use them in connection with its supply of firm power loads? A. No, it certainly does not

[17553] Q. Have you now been informed that there may be some misunderstanding of the designation "Manor Substation"? A. Yes, I have. I have now been informed that there will soon be a 66 kv Manor Substation in addition to the 220 kv Manor Substation.

[17563] FURTHER CROSS-EXAMINATION

By Mr. GOLDBERG:

[17573] Q. Does that mean that you did have all of Penn Water costs, which it incurs in rendering service to its customers? [17574] A. To the best of my knowledge, I have. That was what was given to me, and, as I stated, I started with those figures and took no responsibility for them.

Q. And they are in column 1 on page 25, Exhibit 319; is that right? A. The costs given to me are in Column 1, Page 25, yes.

Q. And those are the costs given to you pursuant to your request for all of the costs incurred by Penn Water in refidering service to its customers; isn't that so? A. I do not recall the exact nature of my request, but I believe it was essentially that.

Q. That is what you had wanted to make your allocations, total costs, all costs of service? A. That is right.

[17613]

GEORGE W. SPAULDING

Cross Examination

By Mr. WAHRENBROCK:

[17667] Q. Well, maybe it is implicit in your understanding as an engineer, but do I understand that what you mean is that for interchange accounting any particular amount of electric energy moving from one party to the interchange to the other is considered as having the same cost as that moving from the second to the first during the same hour, but may not have the same cost during different hours?

A. The reason I ask is that your question carried a statement about which you and I have been discussing for several days, namely, whether the energy and the other services actually were transmitted between two parties—that is, delivered by one and received by the other, and of course, I have continuously stated that they were not in [17668] connection with this transaction, I didn't want to encumber the record by going all through that again and, therefore, I wanted to point that out before I went back and was more specific about the rest of your question. With that understanding, I shall be glad to have the question read and endeavor to explain it.

A. May I answer it this way: that the costs on the system of each party are assumed not to change within a clock hour. And that is the reason that we used the net flow in that hour.

By Mr. WAHRENBROCK:

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Q. And that assumption of no change within the hour does not extend outside the hour and hence you do not attempt to net the net of one hour against the net of the

[17669] other; is that right? A. That is correct, yes. It would be a coincidence, perhaps, if you found the same cost on two different hours in the same day. Frequently, of course, that coincidence does occur.

Q. Yes. Then, it is the assumption of the equality of cost which is the basis for the netting within the hour? A. That is right. Well, may I say the behavior of the costs, rather than the assumption of the costs, and I am not using behavior in any peculiar sense there. The costs don't, as a rule, change very much within the hour, and while they may on one hour change in one direction, perhaps in another hour they may change in the other direction, and for all practical purposes, it is acceptable by the systems with which I am familiar, in connection with the interchange transactions, to assume, based on the experience of the companies, that the costs do not vary within the hour, or if they do, such changes do not justify any more accuracy of accounting.

Q. Then, it isn't because the gross flows are not actual or real, physically, but because of this cost aspect, that they are netted within the hour?

[17670] A. So long as we are talking about a single line between two parties, I think I would agree.

By Mr. WAHRENBROCK:

Q. Yes. A. And by single line I mean a single electrical interconnection between the two systems.

Q. Involving merely actual interchange at that point, such as is involved in this testimony at the bottom of transcript 16616 and the top of 16617? A. No, because at 16616 that is not the situation. We have more than one interconnection over which the flow of electric services are metered separately on the two parallel paths.

[17672] Q. You have spoken in several different connections of net hourly energy flows. The first reference you

made was that on 16595, lines 12 to 15. Now, what I seek to ascertain is that generally, in this interchange accounting, to which Penn Water is a party, the reason for the hourly netting is essentially this cost aspect which you have just explained. A. I think that is generally correct, but to be sure that I do understand it, when we speak of the cost aspects, we have to include, of course, the additional accounting that might be required if you attempted to use shorter periods of time, the amount of records, the amount & of manpower, and so forth, which is all a part of these costs that we are talking about. After all, we operate our system on a practical bakis and not on a theoretical basis at all times in connection with this accounting. There are certain limits to the practicalities of carrying out interchange accounting as distinct from firm power accounting, and we have to consider the practical aspects of it, and we do. And it was for that reason that I stated, on page 16595, that the gross flows of energy have no significance in that connection.

Q. But you don't mean to say, do you, that there are not actual energy flows as measured by the ratcheted megawatt hour meter readings on the system?

[17673] THE WITNESS: No, indeed.

[17681] Q. Referring, if you will, please, to transcript 16626, and your answer, which begins on line 9, where you say that Mr. Roland's assumptions are not related to the energy accounting used in connection with the billing for interchange transactions, do you mean that he has used gross energy flows, while the billing is done on the net hourly basis? A. The accounting and recording of energy is done on a net hourly basis, yes.

[17682] Q. Whereas he used the gross energy flows? A. That is correct, and I don't know of any use made of those

gross figures, and that is the reason I thought they did not have significance.

Q. Yes. But again, in this case, as in the other case, you are not denying that the gross energy flows are actual electric energy flows? A. I am not denying that the meters recorded the kilowatt hours shown, no.

Q. And that the kilowatt hours flows shown by the

meters did occur? A. Instantaneously, yes.

Q. Well, weren't Mr. Boland's figures to which you were here referring based on integrating meter readings?

A. That is correct.

Q. Then, it would not be limited to just instantaneous

flows? | A. It might be.

- Q. Don't the integrating meters integrate all of the flows throughout an hour? A. Well, I am sorry. I see you misunderstood my use of the word "instantaneous." I wasn't thinking in terms of cycles, I was thinking in terms of a few minutes. In other words, if you have power flowing in one direction and for a short time you have it flowing in the other, [17683] actually, of course, the kilowatt hour meters read the proper flow of power for whatever period that may be, in one direction, and then in the reverse direction.
- Q. And the integrating ratcheted kilowatt hour meter readings add up to the total of those flows, however long or short in one direction, and the other ones add up to the totals of those flows, however long or short in the other direction? A. Certainly.

Q. You are not saying here that those flows didn't actually occur as so added up? A. No, indeed.

[17689] Q. By backfeed you mean flow, from Maryland north?

A. From Baltimore and Washington Companies north.

[17709] Q. Directing your attention to transcript 16599 of your rebuttal testimony, and particularly to the sentence which begins on line 19 and ends on line 23, in which you refer to energy originating in Maryland, is the supply of electric energy from the Baltimore Company accompanied by the supply of any other electric services transmitted from Maryland? A. Generally not.

Q. The Baltimore Company does not supply to Penn Water or Safe Harbor voltage regulation services or any power factor cooperation, or any frequency control? A.

Generally not.

Q. When does it supply? You say generally not. A. I say that because the back-feed received from Maryland, under the conditions referred to at this point in the record, is received in the same manner that interchange services are received, and when interchange services are being received, it is the responsibility of the receiving company to provide the necessary voltage regulation, necessary capacity services, the necessary frequency control, and the necessary power factor cooperation.

Q. And the company which supplies the energy under these interchange arrangements does not supply these other [177:0] electric services? A. As a rule, no, that is correct, except by special arrangement, which are sepa-

rate arrangements.

Q. And does the Baltimore Company generally not supply capacity or spinning reserve when it supplies

energy? A. Generally not, that is correct.

Q. Have you examined meter readings to ascertain whether the Baltimore Company did supply any r. v. a.? A. I have examined a lot of meter readings on the log sheets as recorded on the log sheets of the companies, and I find that Baltimore Company almost never provides any reactive kva in such connection. There are a few occasions when very small amounts of such service are provided.

Q. Has Penn Water ever called on the Baltimore Company to provide spinning reserve? A. No, it doesn't have to during those conditions. It has ample for itself.

Q. But does it, in fact? A. No.

[17747] Q. What I have reference to is perhaps explainable by reference to the sentence in your testimony which begins on line 7 where you say "The electric services so rendered are rendered jointly."

[17748] Now by saying that those services were so rendered jointly what did you mean as to what Penn Water did that is different from what it would be if Penn Water supplied those services by itself.

[17749] THE WITNESS: If these electric services were not rendered jointly Penn Water would have to operate much differently than it now does, both as respects the supply of reactive KVA and the other electric services.

[17750] THE WITNESS: I cannot state specifically what Penn Water would do differently but I know it would do something differently.

Q. Is there anything in the physical operations of Penn Water which enables you to characterize, as you do in line 8, the services which it renders as joint services?

[17753] THE WITNESS: The answer is yes.

Q. What?

Mr. Myse: I object to that, Mr. Examiner. That calls for at least several days' testimony. It is all set out fully in his direct examination in the case in chief.

TRIAL EXAMINER: What makes you think it is going to call for two days' testimony?

Mr. Myse: Well, Mr. Examiner, it took that to put it in in the first case in chief.

TRIAL EXAMINER: Why did you put it back in the rebuttal?

Mr. Myse: I haven't put that question in rebuttal. I keep repeating, Mr. Examiner, the whole line of cross-examination is outside the scope of the witness' direct examination.

TRIAL EXAMINER: If this witness had covered the question of joint services, why did you put in that last sertence?

Mr. Mysz: In order to rebut the statement of Mr. Roland at page 912 on line 11 of the record.

TRIAL EXAMINER: The objection is overruled. I think counsel's statement is sufficient justification for the [17754] cross.

THE WITNESS: In order that I may answer it as specifically as possible, which services are we talking about and to whom?

By Mr. WAHRENBROCK:

Q. The question goes to the services which you are referring to in lines 7 and 8 and the two companies which you have in lines 2 and 3, to which those services are supplied? A. Yes. Penn Water alone cannot perform the necessary physical operations and Safe Harbor must cooperate in the performance of those physical operations in order that the proper amounts of electrical services may be supplied both to Pennsylvania Power and Light and to Philadelphia Electric. The physical operations I have in mind are the physical control of the electrical facilities, including the turbine and generators, the transformers, the switching equipment; I am also referring to the availability of the necessary indicating instruments which are essential to the proper control of the flow of electric services and

the facilities that need to be controlled in connection there-

Q. I am sorry, Mr. Spaulding; that does not answer the question.

[17755] THE WITNESS: I cannot be any more specific than I was in my last answer.

Mr. WAHRENBROCK: May I have the last answer read?

(Answer read.)

THE WITNESS: I am referring to the answer that was struck.

[17771] Q. Well, doesn't Baltimore supply three-phase 25-cycle energy which is utilized by the railroad for its requirements, its single-phase requirements? A. No.

Q. Isn't it a mere matter of connection of transformers in order to be able to utilize energy at a single-phase from three-phase facilities?

THE WITNESS: That is possible with the proper connections [17772] and arrangement of transformers, but Baltimore does not have such facilities for doing that.

[17775] Q. Then is it true that your testimony was not referring to all of the backfeed energy received by Penn Water from Maryland as referred to by Mr. Roland at pages 935 to 941?

[17776] THE WITNESS: Mr. Roland did not show the amount of the backfeed energy received by Penn Water from Maryland. He referred only to the amounts after it was delivered to Safe Harbor. I was talking about the same backfeed energy he was except that the amounts are dif-

ferent in two respects: First, he used gross flow and Vused hourly nets. Second, he metered it at one end of the line and I metered it at the lower end of the line in Maryland.

[17805] Q. Do you agree that two-thirds of the entire output of Safe Harbor is sold to Baltimore Company and one-third to Holtwood?

THE WITNESS: I don't know.

[17809] Q. Do you know whether Baltimore receives two-thirds of the energy output of Safe Harbor, either by delivery to it of energy, or by the delivery to others for the account of Baltimore of energy? A. No, it does not receive two-thirds by those two methods.

Q. Why not? A. Because it doesn't.

Q. In what respect does it not?

Mr. Myse: Mr. Examiner, I think that question is [17810] argumentative, and objectionable on the grounds that it is too vague.

TRIAL EXAMINER: Yes.

By Mr. WAHRENBROCK:

Q. Is it your point that when delivery is made to someone else for the account of Baltimore that it is not delivered to Baltimore? A. To whom does it make deliveries for the account of Baltimore?

Q. To the Pennsylvania customers. A. No delivery is made to Pennsylvania customers for the account of Baltimore. Notwithstanding Mr. Roland's testimony, no delivery is made to Pennsylvania customers for the account of Baltimore. I don't think Paltimore wants to be in interstate business right now, either. So I am surprised they would contend that.

Q. I wish you to refer to transcript 16619, if you will, please. When you say that net meter readings are used for interchange accounting and billing, do I understand you to mean that amounts of energy supplied in one direction are offset against corresponding amounts supplied in the other direction? And only the difference is paid for in dollars and cents?

[17811] A. Within the same hour, yes, sir.

Q. Would you agree that by that process the [17812] corresponding amounts during the same hour are, in effect, traded? A. No.

Q. Or bartered, for each other? A. No, I would not.

Q. Why not? A. Because I don't think they are.

[17839] CARL WILLIAM WATCHORN.

[17840] RE-DIRECT EXAMINATION (Continued).

[17848] By Mr. SPARKS:

Q. Now I refer you to page 15616 where Mr. Goldberg was referring to the questionnaire used in the gathering of data on hydroelectric units and where at lines 4 to 7 he asked you to ascertain the number of utilities to whom the questionnaire was sent, the number which responded, and he also asked you to obtain a copy of the questionnaire and bring it into the hearing [17849] room.

Are you now prepared to furnish the data there requested and do you have a copy of the questionnaire before

you? A. I do.

Q. All right. Will you proceed to give the data requested by Mr. Goldberg at that point? A. The ques-

tionnaire was sent out to 72 companies in the United States and Canada, of which 37 responded, many of them for several years and some for only one year. I have a copy of that questionnaire and explanatory notes with me.

[17851]

RE-CROSS-EXAMINATION.

By Mr. GOLDBERG:

Q.º With respect to the questionnaire sent to 72 companies in the United States and Canada, you said 37 responded, many of them for several years and some for one year only. How many of the 37 responded for several years?

A. I don't know

Q. Approximately. [17852] A. The data was with respect to 295 units and the responses accounted for 1,092 unit years. On the average that would result in 3.7 years

of experience as to each of the units.

[17898]

EDWARD S. LOANE.

[17899]

DIRECT EXAMINATION.

By Mr. Sparks:

Q. Mr. Loane, I'show you a copy of a document entitled "Results of Certain Corrections Made to Exhibit 64," which document consists of 13 pages of text and several pages of tables in the back, and which has been identified as Exhibit 351, and ask you if you prepared that exhibit?

A. Yes, sir; I did.

Q. Was that exhibit prepared by you in the light of the Examiner's ruling that Exhibit 350 would not be admitted in evidence because of certain defects which the Examiner referred to? A. Yes, it was.

Q. Is Exhibit 351 a revision of your Exhibit 350? A. Yes, sir.

[17901]

CROSS-EXAMINATION.

By Mr. GOLDBERG:

[17916] Q. When you referred to the table V-b at the bottom of page 12 and the top of page 13 and suggest the change of cost of backfeed energy from Baltimore to a cost computed on a daily net basis, do you there have reference to Article 6 of Item H in this proceeding? A. I suppose it would ultimately get back to that, but I referred to the billing which was carried out when there was [17917] actually billing for the backfeed.

Q. Did you conclude that billing was under Article 6?

A. I know it is.

Q. What billing are you referring to? A. Exhibits which Mr. Spaulding introduced referring to the billing, I think back in 1931 or 1932.

Q. Just that one year? A. Prior to that, too, from

1927 on, we had such billings.

Q. You say there was billing from 1927 on for backfeed. Is that right? A. I believe so.

Q. Have you personally checked that? A. I know it

is so in 1931 or 1932, whichever year he has.

Q. The only year that you are certain about is 1931 or

1932. Is that right? A. Yes.

Q. Was there billing all through the year or just for one month of that year? A. Whenever there was that daily backfeed in those years.

Q. Do you know of your own knowledge for what months there was billing in 1931 or 1932? A. It seems to me the last billing there was September, 1932. I am not

[17918], Q. Exhibit 367 presented by Mr. Spaulding shows billing for backfeed for November, 1931. Are you familiar with that exhibit? A. I have seen it before.

Q. Is it your statement that there are bills for backfeed from the year 1931 in addition to the one which has been marked as Exhibit 367?

THE WITNESS: I don't know.

By Mr. GOLDIERG:

Q. When you referred to the existence of billing, did you have Exhibit No. 367 in mind? A. No. I was more certain about September, 1932 bill, which was the last time such billing was carried out.

Q. That is what you had in mind, at least? A. 1

also knew of the exhibit.

Q. In connection with your statement on page 13 regarding the basis for the adjustment of the cost of the backfeed energy from Baltimore Company, did you take into consideration any of the other provisions of Items H and I? [17919] A. I didn't take into consideration any of it.

[17921] By Mr. REIBLICH:

Q. Mr. Loane, you would agree, would you not, that the combined Baltimore-Safe Harbor-Holtwood system is operated as a unified power pool in the interests of overall system economy.

THE WITNESS: That is right.